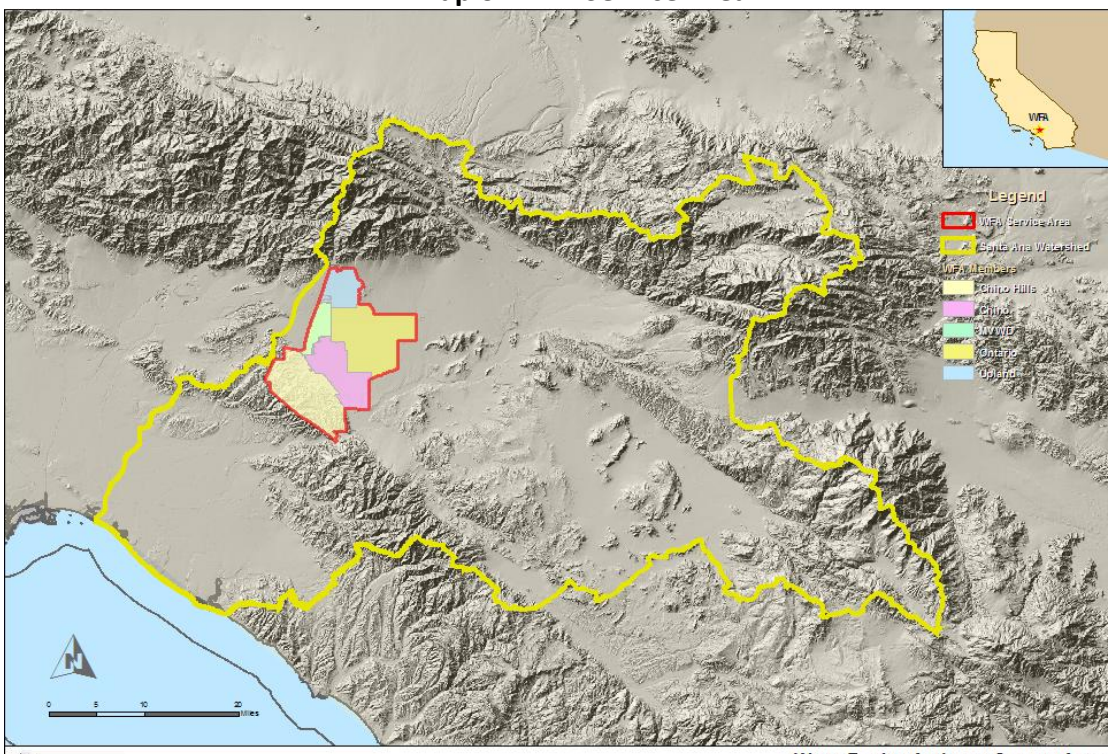
CHAPTER 1
INTRODUCTION

1.1 Overview

This volume presents the Urban Water Management Plan 2010 (Plan) for the Water Facilities Authority (WFA). As a public agency that treats and supplies on a wholesale basis currently about 30,000 acre-feet per year of water, which serves as a supplemental source of supply to other urban retail water suppliers that provide direct water service to approximately 500,000 residents in the west end of San Bernardino County, the WFA is required to prepare an Urban Water Management Plan (UWMP).

The WFA 2010 UWMP was prepared by the Inland Empire Utilities Agency (IEUA) as a companion document to the IEUA Regional Urban Water Management Plan (IEUA 2010 UWMP) and will be included as an appendix in the IEUA 2010 UWMP. IEUA is a member agency of the Metropolitan Water District of Southern California and wholesales imported water to WFA, the Cucamonga Valley Water District and the Fontana Water Company, as well as provides other utility services to the cities located within its service area. The member agencies served by the WFA are encompassed in IEUA's service area.

Figure 1-1
Map of WFA Service Area



This chapter describes the general purpose of the Urban Water Management Plan, discusses the Plan preparation, and provides general information about WFA, its members and the array of agencies with which the WFA closely collaborates in achieving integrated water supply reliability, water quality and watershed management goals for the Chino Basin, Santa Ana River watershed and the Southern California region.

1.2 Purpose of the Urban Water Management Plan

An Urban Water Management Plan (UWMP) is a planning tool that provides guidance to water management agencies for the development of reliable water supplies to meet the needs of their communities. The Plan requires a detailed assessment of a number of planning issues including:

- The water supplies necessary to meet demands over a minimum 20-year period in a single year, and multi-year drought and average year conditions;
- The stages of actions that need to be taken to address up to a 50% reduction in water supplies;
- The actions to be taken to address a catastrophic interruption in water supplies; and,
- The opportunities to maximize conservation and the use of recycled water, local groundwater supplies and other water supplies to reduce the need for imported supplies.

Since its passage in 1983, the California Water Urban Water Management Planning Act (Act) has been amended several times. The significant additions to the Act include requirements to:

- Identity and evaluate water management tools that maximize local resources and minimize imported water supplies;
- Notify all cities and counties within the service area that a plan or plan amendment is being prepared and of the date and location of the public hearing on the plan adoption. Further, the final plan or plan amendment must be filed with all cities and counties within the service area.
- Describe specific water supply projects and implementation schedules to meet projected demands over the 20-year planning horizon;
- Share data between contracting water supplies (i.e., wholesale, intermediate and retail agencies) with a provision allowing suppliers to rely on information provided by a wholesale agency; and,
- Evaluate water quality over the 20-year planning horizon;

The California Department of Water Resources (DWR) recognizes the Urban Water Management Plan as a building block for the development of an Integrated Regional

Water Management Plan (IRWP). An urban water supplier that coordinates preparation of its Plan with other water suppliers within the regional or watershed is acknowledged by DWR as improving regional planning efficiencies and laying the foundation for the development of an IRWMP. DWR may consider a water supplier's compliance with the plan requirements, including achievements and implementation plans for water conservation, when determining eligibility of receiving any funds from DWR-administered programs. A copy of the Act is included in Appendix A of the IEUA 2010 UWMP.

This is the second Plan prepared specifically for the WFA and its service area (the first being the 2005 UWMP). In years prior to 2005, the WFA participated in the development of the regional UWMP prepared by IEUA. The WFA Plan has been prepared consistent with the requirements of the Act and the guidance provided by DWR. This Plan documents and supports the work of WFA and its member agencies in achieving the integrated water supply reliability, water quality and watershed management goals for the Chino Basin, Santa Ana River watershed and the Southern California region. One of the benefits of this Plan is that the agencies within the WFA's service area will maximize the development and use of local water supplies and minimize the need for additional full service imported water supplies over the next twenty-five years.

1.3 Plan Preparation and Coordination

WFA's Plan was prepared by IEUA in consultation with WFA and its members: the cities of Chino, Chino Hills, Ontario, Upland and the Monte Vista Water District. The water demand and supply projections used in the Plan are based upon information provided by these agencies. Additional involvement in the preparation of the Plan included the Santa Ana Watershed Project Authority (SAWPA), the Chino Basin Watermaster (CBWM), and Chino Basin Water Conservation District. The Metropolitan Water District of Southern California (MWD) and Chino Basin Desalter Authority are also reviewers of this document.

As required by the Act, WFA notified all its cities and counties that an Urban Water Management Plan was being prepared and that this plan was consistent with the regional Urban Water Management Plan being updated by IEUA. In March 2011, IEUA sent out notices regarding the IEUA 2010 UWMP to the County of San Bernardino and seven cities in the IEUA service area. The WFA Plan has been incorporated as an appendix within IEUA's 2010 regional UWMP. Copies of the notifications are included in the IEUA 2010 UWMP, Appendix E, and are included herein as Appendix B.

Table 1-1 provides a list of local and regional agencies and their level of involvement in preparation of this WFA 2010 UWMP.

Table 1-1
Local and Regional Agencies Involved in Preparation of the WFA 2010 UWMP[1]

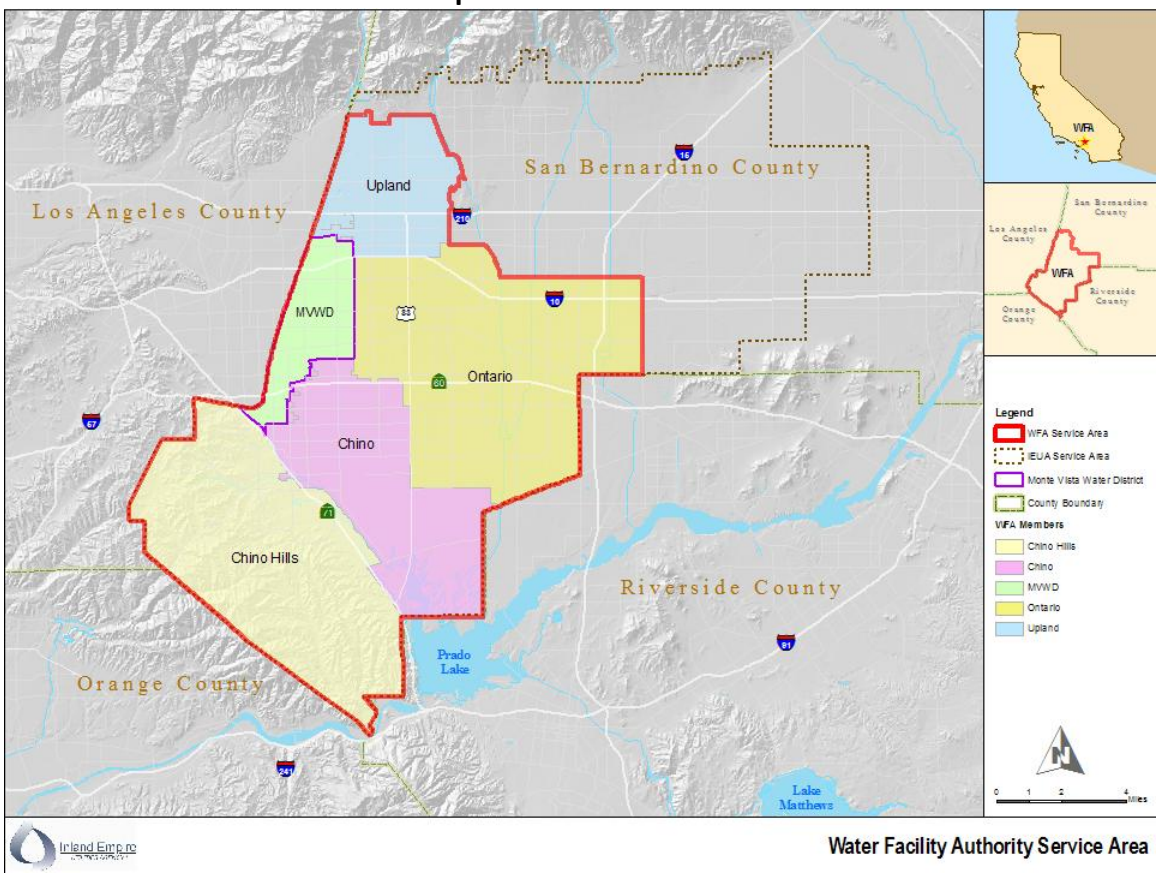
	Participated in UWMP Development	Commented on UWMP Draft	Attended Public Meetings	Contacted for Assistance	Received Copy of Draft UWMP[2]	Sent Notice of Intention to Adopt
City of Chino	X	X	X	X	X	X
City of Chino Hills	X		X	X	X	X
City of Ontario	X		X	X	X	X
City of Upland	X		X	X	X	X
Monte Vista WD	X	X	X	X	X	X
City of Montclair					X	X
Chino Basin Desalter Auth.	X		X	X	X	X
Metropolitan Water District of Southern California	X			X	X	X
Santa Ana Watershed Project Authority	X				X	X
Santa Ana Regional Water Quality Board	X				X	X
Chino Basin Water Conservation District	X				X	X
County of San Bernardino	X				X	X

[1]Development of the WFA UWMP and participation of the local agencies was indirectly through the development of the IEUA UWMP.
[2]WFA members received copies of the UWMP via email notification. All others were referred to the IEUA website through newspaper and/or email notifications.

1.4 Water Facilities Authority and its Member Agencies

The Water Facilities Authority (WFA) was formed in 1980 to construct and operate water treatment facilities that provide a supplemental supply of potable water on a wholesale basis to its member agencies. The WFA was formed as a Joint Powers Authority and is governed by the five water retail agencies its serves: The cities of Chino, Chino Hills, Ontario and Upland and the Monte Vista Water District. Descriptions of these agencies are provided in Table 1-2.

Figure 1-2
Map of WFA Service Area



WFA owns and operates the Agua de Lejos Treatment Plant, a conventional surface water treatment facility that treats and disinfects imported water supplies, primarily SWP water that is purchased from the Metropolitan Water District of Southern California through the Inland Empire Utilities Agency. This plant is located on sixteen acres in Upland. It began operations in 1988 and has the capacity to treat 81 million gallons per day (mgd). Recent historical flows through the treatment plant is in the range of 60-70 mgd during the peak summer months and can be as low as 12 mgd during the lower demand winter months.

The WFA is guided by a five-member board of Directors. Each member of the Authority appoints, by Resolution of its governing body, one member of its governing body to act as its representative on the Board. Through its members, the WFA serves approximately 500,000 residents in the west-end of San Bernardino County.

Table 1-2
Retail Water Agencies Served by WFA

City of Chino	The City of Chino serves water to approximately 84,000 residents of the city and to some unincorporated areas in San Bernardino County
City of Chino Hills	The City of Chino Hills provides water to approximately 79,000 residents of the City within its 46 square mile service area. The City's service area also includes small portions of the cities of Chino and Pomona.
City of Ontario	The City of Ontario supplies water to approximately 175,000 residents of the City and some unincorporated areas of San Bernardino County. The City of Ontario also serves a small portion of the City of Rancho Cucamonga.
City of Upland	The City of Upland encompasses 15 square miles and serves water to approximately 75,000 residents
Monte Vista Water District	Monte Vista Water District is a county water district founded in 1927 that provides retail water agencies to a population of about 47,000 who are located in the City of Montclair, portions of the City of Chino, and in unincorporated areas of San Bernardino County between the cities of Chino, Ontario and Pomona. The District is also a wholesale water supplier to the city of Chino Hills, providing up to 21 million gallons of water per day.

1.5 Regional Collaboration

WFA works closely with its member agencies and other agencies within the region to achieve water supply reliability, water quality and watershed management goals for the Chino Basin, Santa Ana River watershed and the Southern California region. Key agencies, described below, include the Metropolitan Water District of Southern California, Inland Empire Utilities Agency, Santa Ana Watershed Project Authority, Chino Basin Watermaster, Chino Basin Water Conservation District, Santa Ana Regional Water Quality Control Board, and the Chino Basin Desalter Authority.

Metropolitan Water District of Southern California

WFA purchases imported water through the Inland Empire Utilities Agency from Metropolitan Water District of Southern California (MWD). MWD is a public agency that provides supplemental imported water from Northern California (State Water Project) and the Colorado River to 26 member agencies located in the coastal plains of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura Counties. Nearly 90% of the population within these counties, about 18 million people, resides within MWD's 5,200 square mile service area. A map of MWD's service area is shown in Chapter 3, Figure 3-5 of the IEUA 2010 UWMP.

MWD's primary goal is to provide reliable imported water supplies in conjunction with local supplies to meet the water needs of its service area at the lowest possible cost. To

address these challenges, MWD and its member agencies developed an Integrated Water Resources Plan (IRP) in 1996, updated in 2003 and again in 2010. The overall objective of the IRP process is the selection and implementation of a Preferred Resource Mix (or strategy) consisting of complementary investments in local water resources, imported supplies, and demand-side management, meeting the region's desired reliability goal in a cost-effective and environmentally sound manner.

MWD prepares its own Regional Urban Water Management Plan (RUWMP). IEUA's 2010 UWMP and this Plan were developed with and rely upon the information provided from MWD's RUWMP (November 2010). (See Water Code section 10631(k).)

Finally, MWD provides financial support for local water projects implemented by its member agencies that contribute to an increase in the reliable regional water supplies available to the region. Currently, MWD provides financial and technical assistance to its member agencies for implementing water conservation measures, known as Best Management Practices (BMPs). The BMPs are an element of the statewide Memorandum of Understanding regarding Urban Water Management Practices. The Conservation Credits Program (CCP) was established in 1988 by MWD. MWD pays the lesser of one-half the program cost or the equivalent of $195 per acre-foot of water saved through conservation. A variation of this policy provides funding for member agency administered programs.

Inland Empire Utilities Agency

WFA purchases imported water from MWD through the Inland Empire Utilities Agency (IEUA). The Agency was formed as a municipal water district by popular vote of its residents in June 1950 to become a member agency of the Metropolitan Water District of Southern California (MWD) for the purpose of importing water to the area. In recent years, the Agency has expanded its mission to include the provision of regional wastewater treatment services with domestic and industrial disposal systems and energy/production facilities. In addition, IEUA has also become a recycled water supplier and a biosolids/compost service provider as well as being a leader in water quality management and environmental protection.

IEUA's service area covers about 242 square miles in the southwestern corner of San Bernardino County, and serves a population of approximately 850,000. Communities served by IEUA include the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Rancho Cucamonga and Upland, as well as the Monte Vista and Cucamonga Valley Water Districts.

The Agency is governed by a five-member Board of Directors. Each Board member is publicly elected by division to serve a four-year term. The Agency has one representative on MWD's board of directors and two (primary and alternative) commission members on the Santa Ana Watershed Project Authority Commission.

Santa Ana Watershed Project Authority

WFA's service area is encompassed by the Santa Ana Watershed Project Authority (SAWPA) as a result of IEUA's membership in SAWPA. Formed in 1972, SAWPA is a Joint Exercise Powers Agency (JPA) that coordinates regional planning within the Santa Ana Watershed to address water quality and supply improvements. SAWPA is comprised of the five major water supply and wastewater management agencies within the Santa Ana Watershed: Inland Empire Utilities Agency, Eastern Municipal Water District, Orange County Water District, San Bernardino Valley Municipal Water District and Western Municipal Water District.

Since the early 1970's, SAWPA has also played a key role in the development and update of the Regional Basin Plan for the Santa Ana Regional Water Quality Control Board. SAWPA conducts water-related investigations and planning studies, and builds facilities needed for regional water supply, wastewater treatment, or water quality remediation. SAWPA is the owner of a "brine line" known as the Santa Ana River Interceptor (SARI) line, which was constructed to convey high brine wastewater out of the upper Santa Ana River Basin, delivering the wastes to the Orange County Sanitation District for treatment prior to being discharged to the Pacific Ocean. The operation of the SARI line is vital to the removal of salts from the Chino Basin and the protection of this groundwater supply.

SAWPA administers the State Water Bond Act (Prop. 13) funds, approved in March, 2000, for the development of water quality and improvement projects within the Watershed. This Bond Measure provides significant funding for the construction of new water supply and treatment infrastructure within the region. Out of the $235 million approved for the Santa Ana River Watershed, the Chino Basin has received approximately $87 million for the construction of groundwater desalters, groundwater recharge facilities, and new wells.

In early 2009, SAWPA completed a new integrated water management plan for the region known as "One Water One Watershed," or OWOW. Part of the impetus for starting the OWOW planning process was the passage of Proposition 84 by the California voters in 2006. Proposition 84 allocated $1 billion to regions with qualifying integrated watershed plans. The OWOW plan provides the basis for seeking Proposition 84 grant funds from DWR and will help to address the significant water supply crisis which has arisen throughout the state. The goal of OWOW is a sustainable watershed that is drought-proofed, salt-balanced, and supports economic and environmental vitality.

Chino Basin Watermaster

The Chino Basin Watermaster (Watermaster) was established in 1978, by a judgment entered by the Superior Court of California. The Judgment requires that the Watermaster develop a management plan for the Chino Groundwater Basin (See Chapter 3, Figure 3-4 of the IEUA 2010 UWMP) that meets water quality and water

quantity objectives for the region. Groundwater is a core source of supply for WFA's member agencies.

In 1998, the Chino Basin Watermaster developed an integrated set of water management goals and actions for the Basin. Known as the Optimum Basin Management Program (OBMP), this document describes nine program elements to meet the water quality and local production objectives in the Chino Groundwater Basin (See IEUA UWMP 2010, Chapter 7 – Groundwater Management Programs). The OBMP encourages the increased use of local supplies to help "drought proof" the Chino Basin.

In July 2000, the Watermaster adopted the "Peace Agreement" that ended over 15 years of litigation within the Chino Basin. The Peace Agreement outlined the schedule and actions for implementing the OBMP.

In December 2007, the Watermaster adopted the "Peace II Agreement" which redefines the future programs and actions required to implement the OBMP, based on the past nine years of experience and accomplishments in implementing the OBMP.

Throughout 2009 – 2010, the Watermaster updated the Groundwater Recharge Master Plan in response to changes in demand, recharge capacity, safe yield, and other factors. The Watermaster was required, consistent with the Peace II agreement and court deadline, to prepare an update of the Master Plan Update for the Chino Basin by July 2010. The proposed Groundwater Recharge Master Plan includes an assessment of safe yield changes and a revised safe yield projection as well as identified opportunities for enhanced storm water, recycled water and imported water recharge (including low impact development, new recharge projects and integrated storm water and supplemental water facilities).

Chino Basin Water Conservation District

The Chino Basin Water Conservation District (CBWCD) was established in 1949 to protect and replenish the Chino Groundwater Basin with rainfall and storm water runoff from the San Gabriel Mountains. CBWCD uses an extensive system of percolation ponds and spreading grounds to augment the natural capacity of the region to capture runoff for the recharge of the groundwater basin. CBWCD also promotes water conservation through its demonstration water conserving garden and an array of public education programs. WFA and its member agencies work closely with the CBWCD.

Santa Ana Regional Water Quality Control Board

The Santa Ana Regional Water Quality Control Board (SA-RWQCB) is responsible for the development and enforcement of water quality objectives to meet the requirements of the Federal Clean Water Act, California Porter-Cologne Act, and the National Pollution Discharge Elimination System (NPDES). WFA meets water quality objectives through its treatment plant.

In 1975, the SARWQCB completed the Water Quality Control Plan (Plan) for the Upper portion of the Santa Ana Watershed. The plan outlined specific water quality management actions to address water quality and salt (total dissolved solids) build up within the Chino Groundwater Basin. These included the construction of a large well field and desalters in the lower part of the Basin to extract and treat poor quality water, the construction of a pipeline to export brines from the upper Basin to the ocean; and the use of large volumes of low TDS water for groundwater recharge.

Since 1975, a brine line (known as the Santa Ana River Interceptor or [SARI] line) has been built and is in operation. In addition, two groundwater desalting plants (Chino I and II) are in place. The 2000 Optimum Basin Management Plan by the Chino Basin Watermaster has been developed to meet the requirements of the 1975 plan.

Chino Basin Desalter Authority

The "Chino Basin Desalter Authority" (CDA) was formed under a Joint Exercise of Powers Agreement (JPA), creating the CDA, the 25th day of September 2001. The CDA was formed by and among the Jurupa Community Services District (JCSD), the Santa Ana River Water Company (SARWC), the Cities of Chino, Chino Hills, Norco and Ontario and the Inland Empire Utilities Agency (IEUA). Several of WFA's member agencies are members of the CDA (the cities of Chino, Chino Hills and Ontario). The operation of the Chino Basin desalters is vital to the sustainable management of the groundwater supplies in the Chino Basin.

Under the JPA, a six-member Board of Directors leads the CDA; each director is designated and appointed by the governing body of the entity that he or she represents by resolution; an alternate director is also designated to act in the absence of the designated director. IEUA's representative serves as an ex-officio member.